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August 20, 2010

*Submitted Via U.S. Mail and Electronic Mail*

Cliff Raley  
Regional Water Quality Control Board,  
Central Valley Region  
11020 Sun Center Drive, Suite 200  
Rancho Cordova, CA 95670-6114  
[ceraley@waterboards.ca.gov](mailto:ceraley@waterboards.ca.gov)

**RE: COMMENTS ON TENTATIVE WASTE DISCHARGE REQUIREMENTS  
(NPDES PERMIT) RENEWAL, CITY OF AUBURN WASTEWATER TREATMENT  
PLANT, PLACER COUNTY**

Dear Mr. Raley:

Thank you for the opportunity to review the tentative Waste Discharge Requirements and Cease and Desist Order for the City of Auburn (City) Wastewater Treatment Plant (WWTP) issued on 19 July 2010 (Tentative Order No. R5-2010-XXX (TO)). The City appreciates the Regional Water Board Staff's efforts in developing this permit and their diligence in getting it before the public and Board. The City is in general agreement with the majority of the items in the proposed permit and respectfully submits the following comments and clarifications.

**Aluminum**

The TO contains effluent limitations for aluminum that are based on USEPA developed National Recommended Ambient Water Quality Criteria for the protection of aquatic life (both acute and chronic). The TO includes average monthly and maximum daily effluent limitations for aluminum that were derived from the USEPA chronic criterion of 87 µg/L. In addition to the TO, the Regional Water Board has circulated Alternative No. 1 which proposes an alternative aluminum limitation to those in the TO based on site-specific aluminum toxicity data provided to the Regional Water Board by the City. Alternative No. 1 includes an annual average effluent aluminum limitation of 200 µg/L based on the Department of Public Health Secondary Maximum Contaminant Level (MCL) and site-specific factual evidence provided by the City regarding the toxicity of aluminum in Auburn Ravine.

The City of Auburn has proactively implemented a field study that provides compelling evidence related to the applicability of the appropriate criteria for the establishment of final aluminum effluent limitations. This factual information was submitted by the City to the Regional Water Board in a July 12, 2010 technical memorandum.

The City strongly believes that the aluminum effluent limitation in Alternative No. 1 is fully protective of public health and the environment, and is more fiscally responsible than the other alternatives. Based on factual, site-specific, aluminum toxicity information collected by the City and submitted to the Regional Water Board on July 12, 2010, it is clear that the derivation of effluent limitations for aluminum based on the USEPA chronic criterion for the protection of aquatic life is not appropriate for the City's site-specific situation. The adoption of Alternative No. 1 would be consistent with the site-specific aluminum toxicity data submitted to the Regional Water Board, and with the current City of Lincoln Order, which regulates effluent discharges to the same water body (Auburn Ravine). In addition to being consistent with the current City of Lincoln Order, Alternative No. 1 would be consistent with other Central Valley Orders such as the City of Manteca, Modesto, and Yuba City, which are based on aluminum toxicity data similar to that submitted by the of Auburn.

If Alternative No. 1 is not adopted by the Regional Water Board, the City will be forced to complete a water-effect ratio (WER) study for aluminum and request that the Order be reopened and amended to reflect Alternative No. 1. Completion of the WER study is expected to cost the City approximately \$100,000 plus City and Regional Water Board staff time for the reopening and amendment of the Order. The City has no reason to believe that the results of a full WER study will provide results significantly different from the results provided in the City's July 12, 2010 submittal, which resulted in 100% survival of the test species even after being dosed with 5,000 µg/L of aluminum.

#### UV Dose Monitoring Clarification

Page F-24, Part d, of the tentative permit states that the UV disinfection system will "provide a minimum UV dose per bank of 100 millijoules per square centimeter ...". Consistent with UV disinfection system CA DHS approvals, this should be modified to read: "provide a minimum UV dose per channel of ...".

#### Chloroform

On 4 August 2010, the Regional Board issued a letter to the City regarding "Tentative Chloroform Effluent Limitations Alternatives for Tentative Waste Discharge Requirements and Cease and Desist Order". The letter offers two options for establishing water quality-based effluent limits for chloroform in the upcoming permit:

- (1) A final monthly average chloroform effluent limitation of 1.1 µg/L as implemented in the existing NPDES Permit (Order No. R5-2005-0030), which implements the Basin Plan's narrative toxicity objective by applying the Office of Environmental Health Hazard Assessment (OEHLA) Public Health Goal (PHG) of 1.1 µg/L, or*
- (2) Use of the Department of Public Health (DPH) Primary Maximum Contaminant Level (MCL) for total trihalomethanes (sum of bromoform, bromodichloromethane, chloroform and dibromochloromethane) of 80 µg/L to implement the Basin Plan's narrative chemical constituents objective, which results in a determination of no reasonable potential to cause or contribute to an exceedance of water quality objectives for chloroform or total trihalomethanes.*

The City supports Option 2. The City agrees with the following statement included in the Preliminary Draft of the City's NPDES permit posted in July 2010:

*"Because there are no immediate municipal uses downstream of the discharge, and since water that meets the Primary MCL is suitable for drinking, it is not appropriate to apply the OEHHA cancer potency factor to determine reasonable potential to exceed the Basin Plan's narrative chemical constituent objective. Thus, reasonable potential to cause or contribute to an exceedance of the narrative chemical constituent objective for chloroform was evaluated using the Primary MCL for trihalomethanes. This interpretation of the narrative objective is consistent with other recently adopted permits in the Central Valley Region."*

The City has constructed a UV disinfection system to replace chlorine disinfection so that trihalomethane formation during disinfection is eliminated. **As a result, the City believes Option 2 is both protective and consistent with the reduced potential for presence of trihalomethanes in the effluent.**

### **Monitoring and Reporting**

#### ***a. In-Stream Flow Monitoring***

The City's existing Order (R5-2005-0030) required an in-stream flow measurement system in Auburn Ravine. The existing Order allows secondary-level treatment during wet weather events when greater than 20-to-1 dilution exists. The City has been collecting daily background flow data for the last 10 years.

The TO requires tertiary treatment regardless of the flow in the Auburn Ravine. The City is able to comply with this requirement. However, the City believes it will be important to continue to collect background flow data to understand the effluent's impact, if any, on Auburn Ravine Creek.

The City requests an in-stream monitoring requirement be included as part of the Monitoring and Reporting Program. The City proposes to report daily background flows in Auburn Ravine as part of its Annual Report to the Board.

#### ***b. Averaging Periods for pH and Turbidity***

##### ***i. pH***

The City of Lincoln's NPDES permit (Order No. R5-2008-0156) allows for an average period for receiving water pH:

*"The discharge shall not cause the following in Auburn Ravine Creek:*

*...*

***pH.*** *The Receiving Water pH to be depressed below 6.5, raised above 8.5, nor changed by more than 0.5, as an annual average.*

Because the City of Lincoln discharges into the same receiving water, the City requests a similar averaging period be applied.

ii. Turbidity

The City of Lincoln's permit also allows for an annual average for receiving water turbidity:

*"The discharge shall not cause the following in Auburn Ravine Creek:*

*...*

*The annual average turbidity to increase more than 1 Nephelometric Turbidity Units (NTUs) where natural annual average turbidity is between 0 and 5 NTUs".*

The City of Auburn requests a similar averaging period for turbidity in the adopted permit.

**Solar PV System in Pond 3**

In recent correspondence to the Board, the City described its installation of a solar photo voltaic (PV) system within "Pond 3". The solar PV system will provide a majority of the power needed to operate the WWTP. Pond 3's volume available for wet weather flow detention is unchanged and the pond liner system has been protected. The City does not consider this to be a material change to the WWTP process but would like the PV system acknowledged within the description of the facilities to avoid possible confusion in the future.

If there are any questions regarding this correspondence please feel free to contact me at 530-823-4211.

Sincerely,



Bernie Schroeder  
Public Works Director  
City of Auburn